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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/656,109	09/08/2003	Kang Soo Seo	1740-000049/US 7044		
30593 7590 01/11/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910			EXAMINER		
			WENDMAGEGN, GIRUMSEW		
RESTON, VA 20195		•	ART UNIT	PAPER NUMBER	
			2621		
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			01/11/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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1) ⊠ Responsive to communication(s) filed on 12 October 2007.  2a) ☐ This action is FINAL.  2b) ☑ This action is non-final.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1.5.6.9.10.15 and 17-20 is/are pending in the application.  4) ② Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) 1.5.6.9.10.15 and 17-20 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some * c) ☐ None of:  1. ☑ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) ☐ Notice of Informal Patent Application  9) ☐ Other **  10 ☐ Other **  10 ☐ Notice of Informal Patent Application  10 ☐ Other **  11 ☐ Notice of Informal Patent Application  11 ☐ Not	·		Application No.	Applicant(s)					
Situmsew Wendmagegn   Z621	Office Action Summary		10/656,109	SEO ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of ten may be a valished the provisions of 27 RF1.13(6), in no event, however, may a nery be three three files of the correspondence of the provision of 27 RF1.13(6), in no event, however, may a nery be three fively filed  1 If NO period for regly is specified above, the maintain studency period will peply and will expire \$10 K (90 MONTHS from the mailing date of this communication. Pallut to region this net store and period for the period will seply and will expire \$10 K (90 MONTHS from the mailing date of this communication. Pallut to region this net period period for regly is specified above, the maintain date is the maining date of this communication, even if threely filed, may reduce any canned period for regly is period period for regly in the period period for regly and will regly filed, may reduce any canned growth in the set or standard period for regly and the period for the maining date of this communication.  1) □ Responsive to communication(s) filed on 12 October 2007.  2a) □ This action is FINAL. 2b) ☑ This action is non-final.  3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1,5,6,9,10,15 and 17-20 is/are rejected.  Claim(s) 1,5,6,9,10,15 and 17-20 is/are rejected.  Claim(s) 1,5,6,9,10,15 and 17-20 is/are rejected.  The drawing(s) filed on is/are allowed.  Solutions of the priodity documents have been received in this particle.  Application Papers  9) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Application Papers holy-inversed the priodity documents have been received.  1) □ Inv			Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  after 8X (9) MONTHS from the mailing date of this communication.  If 10 period crept is specified above, the maximum table of the communication.  If 10 period crept is specified above, the maximum table period will pay and will expire XX (9) MONTHS from the mailing date of this communication.  If 10 period crept is specified above, the maximum tableuty period will pay and will expire XX (9) MONTHS from the mailing date of this communication.  If 10 period crept is specified above, the maximum tableuty period will pay and will expire XX (9) MONTHS from the mailing date of this communication, even if this yield, may reduce any seared patent term adjustment. See 37 CFR 1.74(b).  Status  1) Responsive to communication(s) filed on 12 October 2007.  2a) This action is FINAL.  2b) This action is finate.  2b) Claim(s) 1,56,9.10.15 and 17-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1,56,9.10.15 and 17-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  Claim(s) is/are objected to to.  Claim(s) is/are abjected to to.  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) better to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  3) All b) Some collar for pri			Girumsew Wendmagegn	2621					
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Entertains of time may be available under the provisions of 37 CFR 1.150(.). In he event, however, may a raphy be throly filed after SIX (6) MONTHS from the mailing date of this communication.  If NO period cropy is specified above, the maximum statutory parked will apply and vall a			pears on the cover sheet with the c	orrespondence a	ddress				
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#### **DETAILED ACTION**

#### Response to Arguments

Applicant's arguments with respect to claim1, 17-20 have been considered but are most in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim1, 5-6, 9-10, 15 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim1 is drawn to a recording medium having a data structure which is non-statutory subject matter.

Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware

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components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim5-6, 9-10 and 15 also rejected because of the dependency on rejected claim.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim1, 5-6, 9-10, 15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (Patent No US 6,266,483) and Yamauchi et al (Pub No US 2003/0014760).

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Regarding claim 1,17,19 Okada et al (hereinafter Okada) teaches a recording medium having a data structure for managing reproduction of at least still images recorded on the recording medium, comprising: an information file area including at least one information file, the information file associated with a data file recorded on the recording medium (see figure 9A and B; column 6 line 58-63), the data file including at least video data (see column7 line 13-23), and the information file including a type indicator indicating whether the video data in the data file is for at least one still image ( see figure 10 element 6a); the video data in the data file is recorded as one or more packetized elementary stream packets(see column11 line 1-10) but does not teach a data area storing the data file, wherein the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator and each still image in the data file is recorded as a packetized elementary stream packet only one still image is represented by each packetized elementary stream packet in the data file. However Yamauchi et al (hereinafter Yamauchi) teaches a data area storing the data file, wherein the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator (see figure9 PES packet length); and each still image in the data file is recorded as a packetized elementary stream packet only one still image is represented by each packetized elementary stream packet in the data file (figure 9 and page 6 paragraph 0073).

One of ordinary skill in the art at the time the invention was made would have been motivated to include length indicator indicating a length of the information file

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subsequent to the length indicator as in Yamauchi in to Okada because it would make managing the file more effective.

Regarding claim5, Okada teaches the recording medium of claim 4, wherein each packetized elementary stream packet includes at least one source packet (see column11 line1-10).

Regarding claim6, Okada teaches the recording medium of claim5, wherein each source packet includes at least one transport packet (see column11 line10-13).

Regarding claim9, Okada teaches the recording medium of claim1, wherein the video data of the data file represents a still image and is recorded in the data area interleaved with other data (see column7 line13-23).

Regarding claim 10, Okada teaches the recording medium of claim 9, wherein the other data is at least one of movie data and audio data (see column 7 line 13-23).

Regarding claim15, Okada teaches the recording medium of claim1, wherein the other data is at least one of movie data and audio data (see column7 line13-23).

Regarding claim18, Okada teaches an apparatus for reproducing a data structure for managing reproduction of at least still images recorded on a recording medium, comprising: an optical reproducing device configured to reproduce data recorded on the

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recording medium (see figure 20 element 2007); a controller configured to control for the optical reproducing device to reproduce at least one information file from the recording medium, the information file associated with a data file recorded on the recording medium, the data file including at least video data, and the information file including a type indicator indicating whether the video data in the data file is for at least one still image (see figure 20 element 2002); the video data in the data file is recorded as one or more packetized elementary stream packets (see column11 line 1-10) but does not teach a data area storing the data file, wherein the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator, each still image in the data file is recorded as a packetized elementary stream packet, and only one still image is represented by each packetized elementary stream packet in the data(see column11 line 1-10). However Yamauchi teach the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator (see figure 9 PES packet length); and each still image in the data file is recorded as a packetized elementary stream packet, and only one still image is represented by each packetized elementary stream packet in the data (figure 9 and page 6 paragraph 0073).

One of ordinary skill in the art at the time the invention was made would have been motivated to include length indicator indicating a length of the information file subsequent to the length indicator as in Yamauchi in to Okada because it would make managing the file more effective.

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Regarding claim 20, Okada teaches an apparatus for recording a data structure for managing reproduction of at least multiple reproduction path video data on a recording medium, comprising: an optical recording device configured to record data on the recording medium (see figure 19 element 1911 drive); an encoder for encoding at least multiple reproduction path video data (see figure 19 element 1904 encoder); and a controller configured to control the optical recording device to record at least one information file on the recording medium, the information file associated with a data file recorded on the recording medium, the data file including at least video data, and the information file including a type indicator indicating whether the video data in the data file is for at least one still image(see figure 19 element 1902 controller); the video data in the file data is recorded as one or more packetized elementary stream (see column11 line 1-10) but does not teach a data area storing the data file, wherein the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator, each still image in the data file is recorded as a packetized elementary stream packet, and only one still image is represented by each packetized elementary stream packet in the data(see column11 line 1-10). However Yamauchi teach the information file further includes a length indicator indicating a length of the information file subsequent to the length indicator (see figure 9 PES packet length); and each still image in the data file is recorded as a packetized elementary stream packet, and only one still image is represented by each packetized elementary stream packet in the data (figure 9 and page 6 paragraph 0073).

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One of ordinary skill in the art at the time the invention was made would have been motivated to include length indicator indicating a length of the information file subsequent to the length indicator as in Yamauchi in to Okada because it would make managing the file more effective.

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Girumsew Wendmagegn whose telephone number is 571-270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alr Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 806-785-81994 USA OR CANADA) or 571-272-1000.

Thai Tran

Girumsew Wendmagegn

Supervisory Patent Examiner